PUBLIC INFORMATION MEETING

STATE OF MINNESOTA

DEPARTMENT OF COMMERCE

In the Matter of the Application of CWS Wind Farm, LLC for a Large Wind Energy Conversion System Site Permit for the 30.75 MW Community Wind South Project in Nobles County

PUC DOCKET NO. IP-6871/WS-11-863

Reading Community Center

McCall Avenue and 200th Street

Reading, MN

MARCH 5, 2012

2:00 p.m.

I N D E X

(Presentation by Mr. Hartman.)

MR. HARTMAN: Mark, do you want to do the introductions?

MR. WILLERS: Thank you, Larry.

My name is Mark Willers. Erlin Weness, most of you know, is the vice chair of Community Wind South. He has something that he is going to read from Dave Benson. Dave Benson, your county commissioner, is at the National County Commissioners meeting in Washington, DC and couldn't be here. But I'll let Erlin make a couple comments, then I'll tell you a little bit about the background of the project.

Is that okay, Larry?

MR. HARTMAN: Sure, that would be fine.

MR. WILLERS: Okay.

MR. WENESS: Thank you, Mark, Mr. Hartman.

This is a letter from Dave Benson. He is the chairman of Community Wind South, he's on detail out in Washington, DC. He wanted to be here, but he wanted me to read this memo to you.

I'm sorry that I cannot be with you in Reading this afternoon to be part of the public hearing for Community Wind South. So many partners

have worked together to make this possible, and I would like to acknowledge them now.

Thank you to the staff and leadership of Xcel Energy for their hard work in bringing this project forward with us. We are grateful to Sherry Ristow (phonetic) and the Southwest Foundation, Jerry Trusty (phonetic) and Annette Barr (phonetic) at the Rural Minnesota Energy Board, and the Southwest Regional Development Commission, my friend George Crocker, and members of the SEED Coalition, without whose work we would not be here today.

Special recognition is due to Mark Willers and the dedicated staff of Minwind Energy and to juwi for their vital and creative partnership with Community Wind South.

Thanks again to our turbine host landowners for putting their trust in us and for their patience and loyalty, that's many of you hear.

I want to thank my friend, Larry Hartman, for his longstanding support of wind energy in Minnesota.

Finally, I want to give my thanks to our Community Wind South board members, Shane Becker, Roland Kutzbach, Chuck Magyar, Rich Lowe, Jerry Perkins, Diane Thier and Larry Voehl for their

commitment and hard work over these many years.

The people of Nobles County and its residents will be among the greatest benefactors of this project. Just this year alone, Nobles County and its townships will receive over 800,000 in wind energy -- wind energy production tax.

I've been so happy to be part of this great venture and I wish I could be with you. Thanks to all of you who have worked so diligently to bring us here today.

That's from Dave Benson, Chairman, Community Wind South. Thank you.

MR. WILLERS: Thank you, Erlin.

This project comes back from a piece of work done at the Public Utilities hearings back in 2003 and 2004. Originally, Xcel Energy requested permits to build four transmission lines in Minnesota, in the southwest third of Minnesota.

Out of those hearings, Dave Benson and others provided information to the Public Utilities Commission that landowners should have more say and more benefit of the revenue from the utility getting to build transmission lines. So out of the Public Utilities Commission hearings in 2003 and 2004, it was brought forth that with the transmission lines

that were going to be built, Xcel needed to offer two 30 megawatt community projects to the communities. And that would be those landowners that had to have poles, steel towers, whatever, that held transmission lines. They had to be offered shares. They don't have to buy shares, but they needed to be offered these shares.

From 2004 to 2006 Dave Benson and Erlin and Rollie and the rest of Community Wind South worked on gathering information to put this project to fruition. There was another group up north that was working on what was then called the Community Wind North project, 30 megawatts.

At that point, Minwind had built a couple different projects in Rock County. We had kind of the interesting part of having a Government Accounting Office, a GAO study done in Rock County, and the highest amount of revenue per taxpayer as an investor was in the Minwind model. And David and the rest of the group came over and met with us and asked if we would assist them, they didn't know who to talk to to buy turbines and where they should go for finance and things like that.

So after some discussion for several months, we got together later in 2006, and we've

been assisting them in moving this project ahead.

Two things that happened right away is we did an FAA study and realized that we could not use the land on the east side of Reading. We met with those landowners that did an original FAA study, but since that's an old Northwest Airline airport, and the FAA study, the Worthington airport is still a designated airport in an emergency. If there was another 9-11 emergency, airliners could land on that runway if it so happens. So we moved over here, or that was the next site we chose because of the wind.

The Community South board members put up their own personal money and rented land in this area over here. That being the hole that you see right here. We went along for 2008 and going into 2009, when the Federal Electric Regulatory Committee, FERC, came out with a ruling that changed transmission costs that put this on the back burner. The regulatory went from around $168,000 per interconnect permit to the new funding mechanism for interconnection at 52 million that the local group owned. And everybody in the ten states, the MISO footprint, the Midwest Independent System Operator, these ten states and Manitoba had the same issue, so there was thousands of megawatts put on hold, almost

3,000 megawatts. And it took a couple years to get that worked through to where they realized that the new plan to put this out was unworkable. So we kept the leases intact because we never knew from month to month when they would come.

Xcel decided to build a wind project here. They had an interconnect permit that was back from the 1990s, that was old, and they didn't have to meet those standards and so that's how they ended up building around us. We had the land originally rented first and they went around us and built. And that's fine, we get along good with them, we met about where they want to put their towers, they came to us, where do you want to put your towers, and we worked together.

Now that we have these FERC rulings figured out on how much it costs to interconnect with the MISO costs, we came to work with juwi, I'll introduce them in a minute. We really like working with them. Aaron Peterson, who used to be in the Minnesota state legislature, I've known for many years, we ran into each other at the wind conference and he was talking about them investing in more projects. So it was an old relationship from ten years ago that brought us to this. I'll let Michael

Rucker talk a little bit about juwi itself.

But what we're trying to do here is move this community project ahead. We would need to have this meeting with Larry helping us here today. What will happen is the landowners, 200, approximately 200 landowners, where all this here transmission is built, will be notified and then they will buy shares in it. And the folks from juwi will purchase up the rest of it. So it's a very interesting working relationship, we like working with them a lot, they've been very open to assisting us and coming up with the finance and the turbines and that has been very beneficial.

Michael, do you want to come up here? Michael Rucker is the CEO of juwi and he can tell you about juwi.

MR. MICHAEL RUCKER: My name is Michael Rucker, I'm the CEO of juwi's wind business here in North America. And we're very proud to be a part of this community project and really appreciate the support from all of you in helping the project get completed. We look forward to doing the other turbines before too long.

It takes a lot of work, as you all know, to make a wind project successful, and years of

effort, sustained efforts in order to get everything together. It's a real monumental undertaking.

CWS and Minwind have done a fantastic job in guiding this project through some very difficult times, in terms of the overall interconnection issues that we had in this part of the country. But it's going to get there and we're really proud to be part of it.

Our company has a long history of working in community-based projects, that's our specialty. We've literally done dozens worldwide in the last year, over 150 megawatts, and for us the United States is actually the most important thing that we're doing now. So we're really excited to see it spinning. And, again, appreciate your support.

With me here today, other than Aaron Peterson, who I will introduce, or he can introduce himself, if you like. Aaron was a state senator here in Minnesota and is our most local juwi employee. You will see him out in the area walking the construction field a lot during the construction period and thereafter.

We also have Jeb Van Sciver, who is the project manager. He offices back in Colorado with me and you'll be seeing him out here quite a few

times. And some other staff will be moving into the area here when the construction begins. And also with us is Hyber Warhon (phonetic) who is from the UV holding company in Germany where our parent is, and he's a specialist in project finance and he's working with us to complete the financing for the project to see it operating this year.

So we're really excited to be a part of it, and if there's any questions we can address, just let us know during the course of wrapping up the development and getting everything set up for this summer.

Thank you.

MR. WILLERS: Thank you. Anyone have any questions? Larry can -- thanks, Larry.

MR. HARTMAN: Thank you.

Just by way of background, the permitting of wind in Minnesota started, I believe, in around 1994. So we've been at it for quite awhile.

For those of you, just in terms of the historical perspective, and I guess it's somewhat interesting for me in terms of historical perspective also, I guess, I've been working with certain elements of wind development in Minnesota since 1994.

As you may recall, the first project in the, I guess, southwestern Minnesota was the Kenetech project, which is just southeast of the city of Lake Benton up in Lincoln County. And that project was comprised of, I believe, 73 turbines. Each one is 333 kW, 120 foot tower, and 133, I believe, rotor meter diameter. And you look at that project and obviously wind projects look a lot different nowadays. And that project was 25 megawatts, approximately.

At that point in time I think the state was aware of the fact, based on Xcel's, I guess, what they were asserting they were going to do was maybe build 50 to 100 megawatts of wind. And at that point in time the Minnesota Environmental Quality Board was the regulatory agency.

And I did happen to speak to Dave Benson, Dave called me on Friday from Washington, and I think I met Dave perhaps back in 1995, if I remember correctly, maybe '94, as well as a number of other people. Jack Pierce passed away a year or so ago, Leroy Stensgard, and a few others that I've known for a number of years.

And the EQB said, well, if we're going to have more wind, you know, the question was should it

be regulated and, if so, how. So we had a task force and Dave and Jack and Leroy and a number of other people are members of that. And the first siting process we went through was for the NSP 2 wind farm, which is northwest of Lake Benton, which is 143 Zahn 750 turbines. And the feedback from the community then was that the regulatory process was too long, too cumbersome, you know, kind of the typical stuff we hear about government nowadays also. So some things never change.

Anyhow, it was decided between the collective group, of which there are about 20 members, comprised of environmentalists, wind developers, county commissioners, township representatives, perhaps mayors of some of the municipalities also, and basically the task force agreed that we'd like a process that's, one, shorter, flexible, efficient, and transparent. And I think based on that, wind siting legislation was passed in 1995, and I believe the State of Minnesota was the first state to actually regulate specifically wind energy facilities.

And I think since then we probably have permitted close to 50 projects, if I recall. And I've been either involved with or been a project

manager on about 37 or 38 of those projects. I was also the project manager for the Community Wind North project. And if you were involved in the Nobles' project, I was also the project manager for that project a few years ago. So over the years I guess I've learned a lot. I still have a lot more to learn, as far as that goes.

But with regard to the permitting process in Minnesota, we have adopted specific statutory language and through the statutory language we have adopted rules. Those rules have been renumbered about three times right now. And it's called Minnesota Rules, Chapter 7854. And that basically outlines the process by which wind energy facilities in Minnesota are regulated in terms of process.

There's a schematic of the regulatory process on the table over there and also, I might add, there's a draft copy of the site permit and the Commission order also. And if you don't have it, you might want to pick up a copy of that. I think when you received notice of this meeting in the mail, the applicant in this case sent you also a copy of the Commission order and a copy of the draft site permit and a notice of this meeting.

After today's meeting, if you have any

comments that you'd like to submit in either writing, electronically, e-mail, fax, anything else, those have to be submitted to our office by the close of business at 4:30 p.m. on March 23rd. And I'll mention that again later on. And that information is detailed in the notice, also. I did forget to bring copies of the notice with me, and my name, address, phone number, fax and e-mail address are all on that notice. I guess I have business cards back there, which is also my mailing address if you choose to send any comments in.

With regard to the schematic back there, it's fairly straightforward. And when a developer wants to build a project and if it's larger than five megawatts, which basically is about three to four turbines nowadays maybe, depending on the turbine size, need a permit.

Now, we have amended the statutory language, some counties can permit projects up to 25 megawatts now. And to date I think about eight or nine counties have applied for authorization to do that. And they can do that, or the Commission can grant that authority, assuming they've adopted minimum permit standards, which we have in rule. Or not in rule, but in the Commission also, which

regards setbacks and a number of other things. And they somewhat parallel or track with some of the things in the draft site permit we have now for this project. And the permits are fairly consistent from project to project, there was a few differences.

So, basically, when an applicant wants to build a wind project, and it's of a certain size, they need to submit an application to us. And in this case the application looks like this on paper. It was sent out to landowners and governmental units also, whether you received a hard copy or a CD, I don't really know. The application is available on our website, it's also available in what we refer to as eDockets. And if somebody wants to know what eDockets is, I'll cover that a little bit more later on, if you need to know or want to know anyhow.

So even before the application came in I believe we met with the developers of the project and just kind of discussed this, I think things in general, how the permit process works. And we received a draft application. We made some comments on that draft application, they went back and reworked it and filed that application, and the application was filed at the Commission on October 17th of 2011. And the Commission accepted

the application, I believe, sometime in November, I forget what date right offhand. And that basically initiates the permitting process.

So what happened then after the application is accepted, that's done through a order issued by the Commission. And then we had a comment period on the application. So you as a landowner would have received a copy of the application with the notice asking if you had any comments on it, whether things were missing, overlooked, what factors should be considered or examined. And I believe we accepted comments on the application completeness through the end of 2011, or close to it anyhow. And then we generally take those comments and consider those in the development of the draft site permit for this project.

We only had a handful of comments. Those comments are basically summarized in the order, which is attached or might have come in the one packet to you from the applicant in their mailing. And to date there haven't been any significant complaints or objections or anything else.

So in, I guess, January, we went back to the Commission with a draft site permit, which the Commission authorized and issued an order on

February 6th of this year, issuing the draft site permit and order. Once that is done, then the next step is the public information meeting. And the meeting gives me an opportunity to explain the regulatory process to you as to how it works, I guess meet the applicant in this case, and you probably know most of the people with either the applicant and/or our project participants.

So the purpose here is, again, as I said, to kind of explain or give you an overview of the regulatory process and then to find out if you have any questions, concerns or comments about the project.

As I indicated a couple minutes ago, the comment period will close the close of business on February -- excuse me, March 23rd. That means that once we have those comments, we'll -- I guess it's our task to take the record in this proceeding, which would be basically the application, comments received, any subsequent comments that I either receive today or they are submitted to our office prior to close of the comment period. We would then take those and prepare a record of decision for the Commission. We prepare a document called Findings of Fact, Conclusions and Order, and present that to

the Commission, along with some other background material, and any changes that we see as necessary to the draft site permit as it now stands.

Assuming things go as expected or well, I guess, if that is the case, the Commission would then issue a final site permit and that means that the company would be free to initiate construction activities at some point in the future. However, there are a number of things that also happen before that.

Now, if you will notice the schematic here, once you get down to comment period, there's kind of a little arm that shoots off to the side and says request for a contested case hearing. A lot of times our proceedings are fairly complicated for, say, large thermal facilities, like coal plants, gas plants, pipelines, wind farms, or other wind farms, I should say, so people can request a contested case hearing. And that's a little bit more of a formal procedure.

Now, again, that's something we do only if there's a request or a need for it. If one comes in, the Commission would also address that. If they decide that a contested case is needed, that would then occur before any permit is issued on that. For

the most part I think we've only had one or two requests over the course of all the projects we've had for a contested case hearing so it hasn't occurred that often. And I guess for the most part wind farms have not been that controversial. It's not to say that they're all noncontroversial, we do have a couple exceptions to that.

And assuming that there is no contested case hearing, again, if the Commission does issue the site permit, then there's an opportunity for judicial review should somebody decide to appeal that decision. If they do, they'd have to come back and ask the Commission to reconsider within 20 days of the issuance of the order and then after that the appeal process would start. And I believe people have up to 30 days to file an appeal on that.

If there's nothing on that front, the next steps that would happen, as the developer prepares to initiate construction we have a few other requirements that are a part of the permit and I'll go over those in a few minutes.

One, we generally have a preconstruction meeting with the developer through our permit. There are a number of compliance documents they have to submit to demonstrate they've complied with the

terms and conditions of the permit. And then once that's done, and that meeting would be held -- or those documents filed, I believe, ten working days prior to any start of construction.

Then once construction is complete and before they begin commercial operation, we'd also hold the preoperation meeting, which basically kind of address who the site manager for the project is as well as some of the ongoing responsibilities in terms of the reporting requirements. And you kind of wonder why we do that.

Well, it turns out that over the years a number of wind farms have been developed, built, and then they get sold. Some of them multiple times. So I think we've had some problems in the past whereby developers sell a wind farm, the next owner doesn't know that they have certain reporting requirements to us. So the preoperation meeting is primarily to instill an institutional memory so that the developer knows that they do have ongoing reporting responsibilities to the Commission for basically the life of the permit. And I'll discuss some of those as we kind of go through that.

Now, again, this is a Community Wind project. I've indicated I've worked on the

Community Wind project, the north one, anyhow, and I guess you folks are probably in somewhat a unique situation, 'cause I view this project, I kind of look at it as a project within the footprint of an existing project.

If you look at a map, and there's a map in the application, that demonstrates where all the 137 turbines are, which are the GE 1.5s out here, associated with the Xcel Nobles' project. Now, that project was originally -- the permit was issued to enXco, it was done as a turnkey project. So in the permitting process we knew that Xcel was going to buy the project.

And as Mark mentioned, during the review of that project we met with Mark, as did enXco, to be sure that there's enough space between the turbines in both projects. And I'll discuss that a little bit later on in terms of some of our setback requirements.

So while this project is being planned, consideration is being given to the Community Wind South project so that the turbine locations for both projects kind of fit within the footprint of the geographic area. So this horseshoe will kind of be filled in to a certain degree for the 15 turbines

proposed for this project, and I'll talk about some of those features a little bit later on.

I guess next I'd like to go to the draft site permit. And do you have a copy? Does everybody here have a copy of the draft site permit? You might want to get a copy. And, Jamie, if you don't have enough, I have some more in the cart over there that can be passed out.

Now, the fact that you folks have probably lived through or put up with construction of the Nobles' project, I'm not sure there's much new that I am able to tell you. I guess you know what it's like to go through the construction of a project that's such a large magnitude or scale. I'm sure there's probably some frustrating moments, hopefully when everything was done and pretty much everything restored those issues have gone away. Kind of like road construction, it's kind of unnerving at the time when you're caught in it, but if traffic goes smoothly one tends to forget that somewhat after the fact.

The site permit that you should have a copy of, again, it says draft on it. So on the front page it indicates who the permit would be issued to, the docket number, which is how the

Commission tracks things. If you want to track it by the docket number, on the very front page you will see PUC docket number, and if you look at the last five digits, the 11-863, the Commission has a website and every project document filed on behalf of this project would be pretty much on eDockets. So if you go to the Public Utilities Commission web page, which is puc.state.mn.us, it'll open up and you can hit eDockets, which would be kind of a bar at kind of the lower left-hand quadrant of that page. If you type in 11 for the year and 863, it'll bring you to the docket page so you can see every document that's been filed with this project or filed as a part of the record in this project. Also, all future documents, construction related, will also be filed on eDockets.

We also maintain a number of documents on our website. That's a little bit different and that's provided in the notice that was sent out with the last mailing also. And we just put the major documents there, not kind of everything, so we do try to, I guess, kind of separate those out. A lot of times people aren't concerned about some of the miscellaneous documents.

If you turn the page we have the table of

contents. And, actually, the table of contents is two and a half pages long. So basically the permits that the Commission issues are pretty much all -- well, actually, the newer ones are organized like this. We restructured or reorganized our permits starting a couple years ago and it's kind of a new format. A lot of the same stuff is there, it hasn't changed too much.

So what I'd like to do is perhaps go through some of the, I guess, perhaps the more significant items. And, again, having just lived through construction of the Nobles' project you might have some idea of why these things are here and I'll try to explain what the intent was, or is, I guess.

Basically, on the first page it just talks about who the site permit's issued to. It provides a project description as to what the equipment is that will be used in terms of turbine, tower height, rotor diameter, associated facilities, which includes your underground electrical cables, transformers, other things like that.

Section 2 basically points out what townships it'll be located in and what section numbers. It talks about the turbine layout. Now,

again, in this case the turbine locations are probably pretty close to being finalized. It doesn't mean there won't be adjustments and minor relocations of some things that might be made. Again, that's kind of an intricate process. So I imagine they'll be going through and doing their due diligence on that. Even though the permit is issued, if they run into problems, they do allow for some deviation as to where those facilities are located. We talk about compliance.

Section 4 talks about setbacks and site layout restrictions. One of the first things, and I guess if I look back at the history of our permits, we talk about the wind access buffer. And for those of you who don't know what a wind access buffer is, I'll try to describe it in the following manner.

Minnesota has a law on the books which talk about wind rights. And I guess concurrent with your, I guess, concurrent, or as part of your property rights you also control the free flow of the wind over your property.

Now, if I have 160 acres of land, for example, and let's say you, ma'am, have 160 acres and you're next to me, and I have a wind turbine, I'm probably not going to be able to put it at my

property boundary because I would need permission from you to use the wind that flows across your property to assure free flow of wind to make my turbine function.

So basically within the site permit boundary we don't allow developers to have turbines, unless there's good reason to do so, within five rotor diameters of the project, the site permit boundary, and that's on the prevailing winds. And then on the nonprevailing winds it's three rotor diameters.

So if you look at the existing layout of the Nobles' wind farm, it's kind of like a horseshoe. So the Community Wind project was kind of in that void of the horseshoe there.

So basically on the prevailing winds, which tend to be northerly in the wintertime, southerly in the summertime, there should be ten rotor diameters between the projects in the Community Wind South project and the Nobles' wind turbines. And in the wintertime, prevailing winds are going to be out of the north. Now, the fact there are no turbines north of that, it's pretty much free flow. However, they still need the wind rights.

So if somebody else came along, say, two or three years from now and decided to build turbines north of the Community Wind South project, they would need to have a five rotor diameter buffer so there will be ten rotor diameters between the two competing projects on the prevailing wind access. On the nonprevailing access it would be three RD. So it would be an accumulative total of six RD between the two projects. And that's to minimize wake loss.

As the air passes over the blades of the turbine, you know, it takes kinetic energy out of the air so it creates turbulence. So you don't get that free flow and it takes some distance for that wind to kind of recoup and I think internally I think we're talking about a three by six spacing, as I remember. And that's basically to minimize wake loss. And this is just an illustrative example.

Years ago, I forget which project, we figured each one percent of wake loss on a 100 megawatt project was worth about $100,000 per year of kind of money left on the table, for lack of a better term.

Well, I guess, if you'd like to recoup that, what do you need to do? Well, basically you

need to get more land, more wind rights. And then with the wind rights, if your turbines are further apart, that means you build more roads, or turbine access roads from the township road to where the turbine is to get your equipment in there. And it also means more underground cabling.

Well, sometimes those things aren't always practical. So if you look at losses from a wind farm, you're going to find a number of different types of loss factors. Part of it might be electrical, part be parasitic, bugs, you know, dirt on the blades, things like that. Icing, turbine availability, a number of other factors. So wake loss is probably the most significant factor.

So since we've kind of started down this road on wind development we've always had this kind of buffer concept. So it's basically to protect a project, its ability to produce energy. And I think if you look at our statutory requirement we talk about efficient use of the wind resource also. If you consider, the wind has a resource also, basically this buffer allows us to kind of put those turbines within kind of the arc or the footprint of the Nobles' project, so you do get to use that resource so it's not wasted or isolated.

For example, in some cases like California, outside of Palm Springs, there the wind comes from one direction, which is basically west to east so you find your turbines basically in rows right next to one another. And wake loss will become a problem there because a lot of these turbines that were built in the '80s are considerably smaller. So when people came in and built turbines upwind, those kind of downwind were kind of not doing as well as they should have done. So the idea of the buffer setback is to protect the resource that a developer has developed from loss of energy from other projects.

Now, again, we've kind of locked in three by five as being fairly consistent. We do allow exceptions if there are good reasons to do so. Factors might include topography, a few other things, but for the most part the three by five has I think worked well for the developers over the years.

In this case we also have setbacks from residences. In this case they've indicated setbacks from homes would be 1,200 feet or 366 meters. We have a couple of standards regarding this. It's kind of sometimes set by the developer on a

case-by-case basis.

In conjunction with this, the Minnesota Pollution Control Agency also has noise standards. So they also have to be in compliance with the noise standards established by the state. And in this instance it's a 50 decibel threshold. At this distance, if I remember the modeling correctly, the noise worst case condition probably shouldn't be above 45 decibels. So typically it would be, what, between 40, 45, Mark, maybe 43 or 44 is basically the worst-case scenario. And noise does propagate. Downwind, I should say. So if you've got three or four turbines in a row and you're kind of downwind, you know, your noise might be higher.

So we look at noise modelings based on the cumulative worst-case scenario, actually, and when they do their noise modeling, I think, companies tend to be fairly conservative. So you might imagine the worst-case scenario and so your design might be -- that is also a factor in design also.

We do have a requirement for a noise study in here. Now, when we did the Nobles' project there was no noise study required on that at that point in time. It's more of a standard item right

now as to how that will, I guess, pan out, or what the requirements will be of that I don't know yet. You know, again, the next thing is noise. So they have to design the project to meet the PCA noise standards. And if not, or if they're in violation, then actions can be taken to either modify the turbine operation or cessation of operation of that turbine until it is in compliance. And that might do with the cut-in speed.

Typically, your noise is probably worse at the lower end of the wind spectrum, in terms of wind speed. Once you reach your rated capacity the wind itself probably generates more noise, background noise, than what the turbines might anyhow.

The other next thing is roads. We have a minimum 250-foot setback from roads. And that would be the center of the tower to the edge of the road right-of-way, which is 250 feet.

Also, we don't allow turbines in public lands. And, again, where we have the public lands, companies try to honor the three by five setback on that also.

Mutually exclusive would be wetlands. Typically, your turbines tend to be on high ground

so typically aren't in the wetlands. Sometimes your cabling might run through wetlands, even your roads sometimes. So that hasn't really been a significant issue to date.

Our permit doesn't allow turbines in native prairie lands. We do have some definitions of prairie, I'm not aware of any prairie being on the site in this project anyhow.

Same thing goes for sand and gravel operations. I know that we do have some wind facilities actually on the edge of some gravel pits, that's to preserve, I guess, the value of the sand and gravel in those areas.

Our structures are required to be freestanding. In other words, if they are guy structures. And in this case the towers will be up to 100 meters, which is 328 feet. The towers out here on the GE turbines are 80 meters, or 262 feet, so they'll be about 60 feet tall and they'll also have a larger rotor diameter.

Again, 4.10 talks about the turbine space, and I guess I've already gone over that. If they're going to have a meteorological tower, we require that to be freestanding also.

A lot of your temporary towers are

actually permitted by the county. And it's fairly common to see those have guy wires on them. There are ways to site temporary met towers so they don't take up as much land, it's a matter of how you do your guy wiring on that also.

We also have prohibitions against being within a navigable air space. As Mark mentioned, I believe this project, and, actually, I've worked on a couple other projects for enXco over in Lakefield, and both of those projects have been kind of nudged to the west to avoid interference with the airports both in Jackson as well as in the Worthington area also.

I guess I'll mention it here. The aviation requirements, that gets into lighting also. The Federal Aviation Administration determines what types of lights will be on a tower, that's not up to the state. A lot of times your lights might be dual lights, white strobes during the day and red flashing lights at night. That used to be sometimes every tower. They have a little bit more discretion now so I don't know what your lighting requirements are.

MR. JED VAN SCIVER: 11 towers.

MR. HARTMAN: 11?

MR. JED VAN SCIVER: Yeah, all of the 15 will have FAA lights on them.

MR. HARTMAN: Okay.

MR. JED VAN SCIVER: And they will also be synchronized with all of the surrounding lights, so they will flash --

MR. HARTMAN: Flash in unison, then. Sometimes you get projects where they aren't.

And I should have mentioned Janet from Janet Shaddix & Associates is here, and Janet is the court reporter so she's making a record of this. Now, I've known Janet for a long time so she knows who I am, but she may not know who you are. So when you have a question you might want to identify yourself by name so she can get it down. Now, if it's a tricky name, like perhaps yours, the last name, you might want to spell it so she doesn't make that mistake. So, Jed, do you want to spell your last name for Janet?

MR. JED VAN SCIVER: Sure. It's V-A-N S-C-I-V-E-R. First name Jed, J-E-D.

MR. HARTMAN: Good example, so thank you.

I guess the other thing we do and try to ask the developers is to minimize the footprint of the project. So, in other words, you don't build

miles of roads you don't need. Now, if they're smart they wouldn't anyhow because of cost of roads anyhow aren't cheap.

Again, also buried, the electrical cables will be underground cables for communication purposes called SCADA cables. That stands for supervisory control and data acquisition. That tends to be fiber-optic and that means from the control center that they can pretty much diagnose what's going on with the turbines, kind of the operating parameters. It'll tell you if there's a problem, something shuts down, it'll probably tell you why so you then send your techs out there to fix it. So if you have a portable computer you can probably operate a wind farm from anyplace in the world.

We also have a section on electrical collector and feeder lines. Now, in this case everything will be underground. The collector lines will run from turbine to turbine and they'll feed into an interconnection point, which will then transmit the power by underground cable. It's about 20,000 feet from the interconnection point within the site to the Nobles County substation.

I have a question, Jed. Do you know what

side of the road you're going to be on on 190th? Is it both sides of the road, depending on where Xcel's lines are?

MR. JED VAN SCIVER: Yeah, the overhead transmission line switches on the road about halfway down. So it doesn't appear that there's room to put both cables in their separate trenches on a single side of the road, so right now the intention is to trench on either side, and that's within the right-of-way.

MR. HARTMAN: Okay. And I don't know if any of you have drain tile. If you do, on your land, it's always good to identify where the drain tile is. If they plow the cable in they'll probably cut the tile. The intent would be to repair the tile if the ditch is open, I guess, or at a time that's agreed upon between the parties. Typically, your drain tile is about 48 inches and the depth could be a little bit more depending on conditions. I don't know what separation distance you planned on retaining between the tile and the cable.

MR. JED VAN SCIVER: Yeah, you know, I'm not sure that we have a definite answer to that, but I did want to mention that it will be an open trench method so that we can visually identify any damaged

tile. And, you know, what we'd like to do is sometime in the course of the next couple weeks is come back and have a landowner meeting, explain what our methods will be and, you know, methods for communication, letting people know when we will be crossing their land so that you have the opportunity to come out and inspect any potential damage and repairs prior to us closing it back up.

MR. HARTMAN: And a lot of times you don't know where the drain tile are until you cut them and then you have a pretty good idea. And you're probably all familiar with that if you're in the farming business anyhow.

The next section, which is Section 5 -- are there any questions about setbacks at all that I've kind of gone over?

One other thing I should mention on setbacks and I forgot. Nobles County has some zoning ordinances also, and some of them are a little bit different than ours, some are a little bit more stringent, others aren't as stringent. So where the county standards are more stringent than ours, and I think I've got those identified in the back, it's my understanding that Community Wind South is going to abide by those requirements also.

Where ours are more stringent, they'll also comply with those. So in one sense they're trying to serve two masters and if there are other masters out there they'll probably try to serve them also.

So once we -- I guess, once we're, I guess, if a permit is issued, at least ten working days prior to the preconstruction meeting they would have to file their site plan. Which would basically be a document that kind of shows how they're meeting all the compliance setbacks. They would also distribute the permit within ten working days of issuance by the Commission to all the units of government and to landowners prior to -- five days prior to start of construction on their property also.

In the past, when I've held preconstruction meetings, I think for the Nobles' one I came down here and we met at the county's facilities and it was pretty well attended, I think. I just had one awhile ago at a different county, but we had several county commissioners there, the ditch inspector, the zoning person. So whoever at the county would like to be there. And typically the road engineer is there also, and I'll get to the road engineer in a little while. And development

agreements.

I guess, prior to the start of construction, the permittee will have to inform all the employees, contractors and other persons involved of the terms and conditions of the permit to ensure compliance.

Prior to a preconstruction meeting the company would be asked to designate a field representative. So if you as a landowner are having an issue or if there's something that needs to be reported to me or I need to get ahold of somebody, I'll have that number, and that number is generally posted on the eDocket website also, and I'm sure that the company will make it available to local units of government for their purposes also.

We also ask them to designate a site manager, somebody who will be responsible for overseeing compliance with the terms of the permit during its operation phase. And, again, I've talked about the preconstruction meeting with the field representative, the state permit manager, the contractors there, and then either township representatives, county representatives, or whoever, and we'll probably try to hold that down here also.

Again, once construction is completed

there will be a preoperation compliance meeting. Then also, I think, ten days before the preoperation meeting, the company will have to file a complaint reporting procedure. You as a landowner will get a copy of that so if there are any issues you can certainly call the company, they'll try to resolve them. If you feel they are not resolved and you wish to file a complaint, you can get a copy of that form. We've got a template, I think, in the back of the permit and they might draft a form just so we can track it and comply with issues that come up. And typically those are filed with the company in their ongoing reporting requirements, they have to submit a report to us about complaints on the 15th of every month for the duration of the project.

Section 6 talks about surveys and reporting. Prior to the start of construction they would have to do biological and natural resource inventories. I think for this project most of that information has already been identified. In the application they might revisit that in some areas depending on whether other items have been changed or not.

One of the other preconstruction documents would be, I guess, a document illustrating

what shadow flicker would look like. Shadow flicker is a phenomena that occurs, I guess, it's most pronounced in the winter months and it occurs primarily early in the morning or late in the evening on those winter months. So if the turbines are in and let's say the wind is blowing out of the north or south, it doesn't make much difference. Your shadow flicker profile, it kind of looks like an outline of a butterfly, basically. So you can calculate how many hours and minutes and almost seconds per year there will be shadow flicker. And basically shadow flicker occurs when the sun is shining and the turbines are spinning and there's a course mechanism in which that shadow will fall. Generally they do modeling for that. I believe the modeling indicates that I don't think there is anything above 40 hours.

MR. JED VAN SCIVER: Nothing above 40, correct. And it's available in the site application, there's a visual clarification of it.

MR. HARTMAN: And, again, if shadow flicker is an issue there is some mitigation that can be done. It might be landscaping, shades, blinds, something else like that. It's hard to pick up the turbine and move it once it's in the ground.

But there are certain things that can be done. Nonoperation is another option also, although developers don't like to discuss that because it means they won't be producing electricity or revenue then. So there will be a map.

And, again, as Jed indicated, the shadow flicker modeling has been diagramed or illustrated in the application. So depending on where your house is you can tell how many hours of shadow flicker you might have on a given year. And just because you see a number there doesn't mean that's how much you're going to have. Again, if the sun is not shining you aren't going to have shadow flicker. If it's shining it's a possibility.

So, again, your longest phase for shadow flicker is going to be when the sun is on the horizon for the least amount of hours per day, generally in the wintertime would be your worst-case scenario. And if you're familiar with what shadows look like from the turbines, they tend to be kind of thicker and darker the closer you are. You know, as you move further and further away it gets a little bit more elongated and lighter. Again, shadow flicker can extend out a few thousand feet.

I'm not aware of it as having been an

issue to date. I know some people might be more sensitive to it than others. Sometimes it's a little bit disruptive when you're driving along the road and you experience shadow flicker. But there aren't any health or safety standards for shadow flicker to date.

I think some states have had discussions about trying to limit it to between 30 and 40 hours per year. Now some homes within the site will probably have very little shadow flicker, worst case, probably in the neighborhood of 40 hours, as Jed mentioned a little bit earlier.

Prior to the preconstruction meeting they would also file their archaeological work, which has pretty much been done so far.

The next category, 6.4, addresses interference. When companies put together applications, there are a number of things they have to worry about. Up in the air you have to worry about microwave beam paths, for example. So if you have a beam path that's going from point A to point B, for example, the state I know is doing some work on the ARMER System around here, which is the new kind of emergency response system, I forget what ARMER stands for right now, but they have a very

focused beam path, so microwaves kind of operate site to site. So if you had a beam path here and you've got the tower and you're going to here, you don't want any turbines within the fresnel zone of that beam path. And more if one or two comes it will adopt the beam path setback ordinance. So companies try to avoid beam path interference. And that would be for what's in the FCC database, and there is a study in the back of the application that talks about that.

Other types of interference might be radio, TV, electronic interference also. And, again, if there are interference issues, it should be reported, the company made aware of it so that they can take corrective actions.

If, for example, I imagine your TV station primarily comes from Sioux Falls, Worthington, and so if you have an outdoor antenna, depending on where the turbines and the blades are in relation to that, you might get some disruption on the TV signal. Hopefully you wouldn't. I think now that we're in the digital age -- I've got one project where it's been more of a problem than it's been elsewhere and part of that has to do with the equipment used to receive the digital signal, is my

understanding. And, again, that hasn't really been a significant issue to date with respect to that. I know of one project where it has occurred, the company has provided the residents with cable boxes or satellite boxes and the company pays the bill on that also.

Again, sometimes it might be corrected by merely orienting the antenna, going to a high gain antenna. However, if you go to a high gain antenna, if you kind of gear it towards Sioux Falls maybe you don't get Worthington or some other place then. So sometimes it's a little bit iffy.

If the company does any wake loss studies, they're supposed to file copies with us. Again, the same thing, they might be obligated to do a noise study here. We've had three or four others that have been done and we've seen, I guess, different levels of detail and we're trying to sort through some of those with the Pollution Control Agency regarding compliance.

The company also has to file, and I guess it's posted, I guess it was sent out, perhaps with the notice was a copy of an avian and bat protection plan outline and subsequent to that they filed a basic avian and bat protection plan which kind of

documents what they'll be doing during the operation of the project in terms of monitoring either birds or bats that are killed by the turbines.

Bird fatalities, if you look at the Buffalo Ridge study, which was done -- oh, it's a four-year study that I think spanned the late '90s to early 2002. The bird fatalities were actually pretty low. The bat number, we did a two-year bat study, the numbers were a little bit high but they seemed to dissipate after the first year. The avian and bat protection plan is a fairly new requirement and here DNR considered this to be a low risk site, so it's kind of the basic plan, just in terms of documenting what happens if you find something.

One of the other requirements is project energy production. By February 1st of each year they have to report to us the kind of monthly energy production and capacity factor. And it used to be that that was done in the end of July and we modified this a little bit. Wind energy developers have to report to the Department of Revenue on February 1st of each year, on a form called an M25, what their energy production was for the previous year. The Department of Revenue takes those numbers and they send those numbers out to the county with a

statement that the county, in turn, I guess, sends to the company for the payment due. And it's my understanding those payments are due, as are our property taxes, May 15th and October 15th of each year. And I'll talk a little bit more about that later on.

It used to be that we also had some requirements for the wind resource use, which is probably more detail, and I guess we have less need for that now than we used to and that's basically on the request of the Commission now. And the idea here is to try to get some of these numbers in the public domain actually. I know sometimes wind developers are leery of that, in terms of the detail stuff.

If there are any extraordinary events, for example, if a tornado comes through and knocks down a turbine they're supposed to notify us within 24 hours. You may recall last summer, a number of high winds came through the Buffalo Ridge area and I think three turbines were lost on the Kenetech Project, even though they're old turbines. And Xcel lost a number of transmission lines or a number of miles of transmission lines that put some of those projects out of commission for two to three months.

So that's what we mean there by extraordinary event, which includes fire, tower collapse, thrown blades, collector feeder line failure, injured workers, and for the most part we haven't had much of that.

I think Xcel has done some reporting on the Nobles' project, this is issues with the transformers where a number of those have been placed and it's just so we know what's going on with the project if there are issues.

Section number 7 talks about clearing of the site, basically. We recommend they only clear what they need to. There are measures there for protection of topsoil and separation of, I guess, topsoil separation. So when they come in and build the turbine access roads it will generally push the topsoil off to one side so they'll build up to their -- your girlfriend calling?

(Cell phone ringing.)

UNIDENTIFIED: It was the boss.

MR. HARTMAN: Oh, even worse.

So they'll push that aside during the construction phase. And then your temporary roads, for getting cranes in there, which are quite a bit wider than your permanent roads, so once the crane is done and they start to restore, they'll kind of

pull it back and restore or redistribute the topsoil along the road. And they might do some alleviation compaction --

(Cell phone ringing.)

MR. HARTMAN: They must want you pretty bad.

If there's any compaction they'll try to alleviate the compaction and that is best handled between the landowner and the company as to how that is done effectively, I guess.

I don't know if there's any livestock within the site. So, in other words, they have to take protection to protect livestock. So if you have open trenches you don't want your cows falling in, they'd probably have to be fenced in to prevent that. If you do have cattle and it crosses an access road, the company will probably put a gate in. Assuming it's a gate, you know, a gate can be a chain that you drop and drive over. It took some companies awhile to understand that concept. Or you can have a swinging gate, but if you have a swinging gate then in the wintertime you have to clear snow the radius of the gate if you want to open the gate. So typically we don't see too many gates anymore. I think a lot of times companies did it for insurance

purposes. I never did understand that, but so be it.

Drain tiles, again, they have an obligation to replace or repair all drain tiles if they are damaged by the construction activities or if it's related to the project, actually. They'll have staging areas for the equipment and typically they'll negotiate that with the landowners.

Roads, 7.8. Basically you have some general language on public roads, turbine access roads and private roads. And I think this might be the first permit that I've included it. It started down here, and perhaps on this project or some of the other ones. But companies have now typically entered into road development agreements with the county and/or the townships.

Now, in this case it's my understanding there's a road development agreement that has been developed between the applicant and the county. And sometimes the townships can delegate their authority to the county highway engineer. It's my understanding in this project they aren't so there would be a different sort of agreement with the township then also. Or at least the road authority having jurisdiction over the roads being used.

I find as a group the road engineers have been pretty diligent and they do a pretty good job. Typically, where I have projects and counties that don't have projects before, I either have them call Steve or Tim Stall over in Jackson County to find out what they should be doing, and the road engineers are pretty quick and efficient about getting that done. So that's something that's a little bit more standard now and routine than what it used to be. And generally you'll find that I think wind developers will perhaps leave the roads in better shape once they're done than what they found them in before they started construction. And, again, the wind companies will typically pay for damages caused by their construction activities as well as to restore the roads also.

Turbine access roads. Just because roads cost money, the companies like to build as few roads as possible. You as a farmer would probably like to farm as much of your land as possible also. So typically the roads are low profile roads and you can get your equipment over them. You know, going back a number of years, I guess, I was surprised to find out a couple of things about roads. I was thinking roads might have been a problem, and much

to my surprise, I was told by several farmers that there are several advantages. One, the roads allow them to get their wagons in in what otherwise might be wet conditions so they didn't have to bother about getting stuck or anything and so that's kind of a win/win. And also, I was surprised to hear some landowners tell me that when they had their land open for hunting and somebody got a deer it was a little bit easier to get the deer out also.

Cleanup. They have an obligation to kind of clean up daily as the construction process goes on. Tree removal hasn't been an issue, to speak of.

The company will also have to do a soil erosion and sediment control plan, and that's done by a permit they get from the Minnesota Pollution Control Agency. And that's part of two permits, I guess, a Storm Water Pollution and Prevention Plan and the National Pollutant Discharge Elimination System, which is required for any construction project, I think, over five acres, unless they've lowered the threshold on that.

Again, our permit also requires that they restore the areas disturbed by construction as soon as possible afterwards. And I think we have it here at 12 months. It tends to be a seasonal thing

depending on when construction is finished. So it shouldn't carry over more than a season anyhow.

There are requirements also in the permit for a disposition of hazardous waste. They'll generally get a license from the MPCA as a small quantity generator for that. If they apply any herbicides, which will be done, I guess, by people who are qualified to do that.

We have a requirement to provide education materials to landowners regarding public safety. A lot of times that's done through your road agreements and signage and other things like that.

You might find that stop signs are temporarily relocated, for example. Where access roads interface with the township or county roads, they might have to do a cut on those and that would be restored after it's done.

Companies also have to file an emergency response plan, which covers fire. I guess, fire protection and medical emergency, should anything happen. Typically, the companies work with first responders in the area.

We require all towers be identified and, again, that ties into public safety. I think up in

the Ridge, early on, I think one day they had a fire in one of the projects, something had fallen off, and the fire crew I think went out there and it was so foggy out that day that they couldn't tell where the turbines were. So the emergency responders will have a map for construction purposes so they'll know what the turbine number is so in the event of something unfortunate happening they know how to get there and where to go.

With regard to safety during the construction phase. If something happens to a worker within the tower, the company is responsible for getting them to the ground and then the first responder takes over. The company personnel have training on getting, I guess, people off of the tower. And I know that some of the developers do work with the emergency response units in the area on kind of a training basis type thing.

In Section 8 of the permit we talk about as-built plans and specifications. Within 60 days of completion of construction those are filed with us so we'll put the turbine locations into a database that we have. The county will probably get copies of those. And also become members of the 911 system response, so the turbine signs and other

things like that for emergency responders also.

8.3 talks about expansion of site boundaries. That doesn't really have much bearing on this.

Section 9 talks about the decommissioning plan. So at least ten working days prior to the preoperation meeting they have to submit a decommissioning plan. The other part talks about site restoration again. If during the life of the project any turbine is abandoned, it would be decommissioned, removed from service and I guess taken down or decommissioned, the foundation taken down to a level of four feet and the landowner restored.

Section 10, as part of the preconstruction meeting, they have to demonstrate that they have wind rights over the lands on which they're building. They have to have a Power Purchase Agreement. Here they're selling the power to Xcel Energy. Our permit allows them two years to start construction, if not, they have to come back and basically tell us why they didn't start construction.

Our permit generally preempts state and local rules unless they specifically do apply. In

this case some of the counties' standards will apply to the setback requirements.

The entity is also responsible for obtaining all the other federal, state or local permits needed, and they're required to comply with all those permits, as well as municipal permits.

The Commission can review permits on a five-year basis and change, modify or amend those. That's something we haven't been particularly active on. We do have a couple where we are going to be doing a review on those where they haven't built in a timely fashion, we'll probably modify and change their permit to bring them up to current standards.

If they're in violation of one of the permit conditions, the Commission can consider revocation, modification or suspension of that permit until the issue has been corrected.

Permits are transferred sometimes as projects are sold. We do have a process for that.

We have a provision for right of entry. If I want to come out and do some, I guess, inspection or something, it allows me to enter the site, and we also check with the landowner before we went on the property.

If there's information they want to treat

as proprietary they can do that, there's a mechanism for that in Minnesota statute.

The permit is good for 30 years from the date of issuance.

And I believe section 13 talks about the application of Nobles County setback regulations. Now, here the county standards, it's 1.25 times the height, total height, which would mean tower and blade, from a property line. For meteorological towers it's -- the fall zone is certified by the engineer plus 10 feet, or one times the total height. Rights-of-way, existing road rights-of-way is one times the height of the project from any road which exceeds our standard. So that's what they would be doing.

The county also has a setback from wetlands of 600 feet. I don't know if that's an issue on this project, or in terms of compliance it's not.

Then we have, I guess, Attachment 1, it would be the site map. Attachment 2, the complaint procedure, as to how that's supposed to be set up and function. Attachment 3 is the compliance filing procedures. And Attachment 4 lists all of the things that they have to file prior to the

preconstruction meeting, of which there are a number.

And then they have, I guess, we've got it broken down by preoperation compliance and just other requirements. So that basically lays out what we expect the entity who obtains a permit from us to do in terms of compliance.

Are there any questions about what I've covered?

I know I've gone over an awful lot. The fact that you folks probably lived through construction of the Nobles' project, just the fact that from where you live to get to town or someplace else you probably encountered a number of things so I guess based on your experience you're probably in a better situation to make comments than I am.

But does anybody have any comments or questions about what I've covered?

(Inaudible.)

MR. HARTMAN: Oh, a typo. I would have caught that eventually.

Does anyone have any questions about anything? Yes, sir.

MR. BRENT FEIKEMA: Do you have any idea --

MR. HARTMAN: How about a name?

MR. BRENT FEIKEMA: Brent Feikema, F-E-I-K-E-M-A. Any idea who the general contractor will be?

MR. JED VAN SCIVER: Yes. Yeah, we're continuing negotiations, but it looks very much like it's going to be a company called Signal Energy Constructors. And it's a joint ownership entity between a crane and rigging company, a very proficient one within the industry, as well as a general contractor. So Signal Energy and Barnhart Crane are the owners of that.

MR. BRENT FEIKEMA: Thank you.

MR. HARTMAN: Typically, and I don't know what the situation is here, I know that Mortenson was the contractor on this one, and in my discussion with Mortenson I think they probably had a couple hundred people, staff people on that one. But it would probably be at the maximum, Mortenson might have about 15 percent of its people on staff and the other 80 to 85 percent might be local contractors who are qualified to do the work. Whether it's, you know, cement, electrical, wiring, road work, something like that. So it'll be kind of a mix of things that come in with the community in terms of

local employment opportunities, or those with certain skills that might not be from this area.

Does that answer your question, sir?

MR. BRENT FEIKEMA: Yes, sir.

MR. HARTMAN: Thank you.

Any other questions? Yes, ma'am.

MS. COLLEEN GRUIS: Colleen Gruis, G-R-U-I-S. And I just wondered, if all the permitting goes according to plan, when do they think they will start construction?

MR. JED VAN SCIVER: Planned mobilization of the site is May 1st, 2012.

MS. COLLEEN GRUIS: Thank you.

MR. HARTMAN: Now, mobilization might mean different things. Generally it means when the weight restrictions come off the roads. Typically, it might be May 15th. I see there's somebody here from Nobles County, I don't know if I know you or not.

MR. WAYNE SMITH: I'm Wayne Smith, I'm the environmental services director.

MR. HARTMAN: Oh, yeah, I've talked with you Wayne. I'm sorry.

MR. WAYNE SMITH: And I think you may be right, it may be the May 15th date. So May 1st

would be a good time.

MR. JED VAN SCIVER: Right. Yeah, we recognize that we're subject to the frost laws and we'll move as quickly as we can.

MR. HARTMAN: Do you want to, maybe Mark or Jed, do you want to talk about the construction schedule and timing and the steps and phases so people have an idea?

MR. JED VAN SCIVER: Sure. So, you know, if all goes to plan and we mobilize in early May, although it'll be whenever the frost laws come off, the first thing we'll do is come in, set up our site, lay down the yard, begin construction on the roads.

Once the roads are in place we'll begin construction on the foundations. The foundation also includes the crane pads and turbine-specific lay down areas where you'll stage your components for the wind turbines. And then from there we'll begin the collection system, the underground communication and electric lines.

Throughout that process we'll also be working on the site switch yard, which is the collector yard where all the energy will be collected from the facility. And from there it will

be transmitted on an underground line back to the Nobles' substation that you all are very aware of here. Which, as Larry mentioned, is about four miles, that will go in earlier as well, so as to allow us to take back the power necessary for commissioning.

The turbine components will arrive in September. So in the month of September you will start seeing the turbine components arrive, erection will begin shortly thereafter, and commissioning as well. So the whole thing is set to be complete by the end of October.

MR. HARTMAN: Jed, would you maybe want to cover, assuming you're going to start sometime after May and finish up, you're going to kind of span the agricultural season, you know, planting crops and crop losses and stuff like that?

MR. JED VAN SCIVER: Yeah. Well, crop losses and the compensation for that, of course, is covered in the various lease language that most of you, if you're landowners, have seen. We will have established construction boundaries.

And as I mentioned earlier, I think, we'd like to organize fairly quickly in the next couple weeks a landowner meeting where you get together

with everybody, look at what those construction boundaries look like within your particular property and come up with the best plan for construction that helps mitigate, to the greatest extent necessary, the disruption of your core operations, which is your agricultural.

So I think it would be a sort of dialogue to come to the right conclusion and solution. But, you know, we will not be operating outside of those construction boundaries.

Is that what you were looking for?

MR. HARTMAN: Yes. Again, it's up to you as to whether or not you want to plant something or not, realizing that you might not be able to harvest it depending on timing also. So that's one of the things the company will talk to you about also in your meetings with them.

Wayne, is there anything I missed with regard to the county setbacks at all?

MR. WAYNE SMITH: No, I think you've covered it very good. And I want you to know that from our perspective we're very happy that the state takes it over. Someone like yourself, who has been on 35 other projects, is much more qualified than the individual planning and zoning administrators

for 80 different counties. So we're very appreciative of the state taking over the permitting process.

MR. HARTMAN: And I think -- I guess I talked to you a couple months ago probably, and I think we probably had some conversation during the Nobles' one, and I'm assuming, from the county perspective, did things go pretty well for you on the Nobles' project?

MR. WAYNE SMITH: Yes, they did, they went very well.

MR. HARTMAN: Good. We're always glad to hear that. And generally I'll try to talk to the road engineer and a few other people at the county level two or three times or as necessary during the construction process also, to be sure that things are kind of going the way they're supposed to anyhow.

Are there any other questions at all? No other questions?

MR. DARRELL BOOTS: Have you got any idea what the tax base of this will bring into the county and the townships?

MR. HARTMAN: There's probably a number in the application, I don't remember what it is.

MR. DARRELL BOOTS: I don't remember seeing that.

MR. HARTMAN: Projects in Minnesota are classified three ways for taxation purposes. And actually I wanted to mention this. When we first started permitting wind energy facilities, it's one thing to have a permitting process and, again, given kind of what we were charged with doing or what the approach was, we kind of developed the permitting process. But then just for discussion purposes so you understand, you know, obviously the people who are participants or either have sold wind rights or for turbines access roads receive an annual payment.

So recognizing that, then, you also recognize that while some people are going to have to look at them and may not like them so what does the community benefit mean.

And to that degree, if you look at a couple of the first projects in Minnesota, the company paid an awful lot of taxes the first couple years, then, because of accelerated depreciation, and by year five or six they were only paying maybe $50,000, $60,000 and they might have been paying $600,000 per year.

And, again, the way the industry is set

up, you know, that really doesn't benefit the community very much in terms of long term so we looked at the idea of production tax. And originally some counties were a little bit leery of it because they said, well, if they don't work we don't get anything. And so we kind of, you know, kept at it, and the production tax I think finally passed in 2002.

Now, the production tax is, I guess, is kind of like a three-legged stool. If you look at a couple of the elements as being the permitting process where the third leg is kind of production tax where you kind of bring in the community benefit aspect. So wind farms are taxed at three different mill rates. Projects under two are taxed at the lowest rate, which I believe is .012 mills per kilowatt-hour. Projects between two megawatts and 12, I believe it's .036. And projects that are 12 and larger are taxed at a mill rate of .12 cents per kW.

Now, I just got from Revenue last week, for example, the wind developers in Minnesota last year produced collectively 7,326,422,635 kilowatt-hours. Of the 22 counties that presently host wind turbines, the taxes payable in 2012,

$7,830,301. For Nobles County, Dewald Township, for example, the projects in Dewald Township produced a tax equivalent of $201,902. Larkin Township, $181,194. Summit Lake, $243,318. Wilmont Township, $116,000. There's another one in Wilmont, 12,000.

So as Mark mentioned earlier, that the wind developers will pay Nobles County about $827,190. Of that money that goes to the county, the county keeps 80 percent of that and the hosting townships get the 20 percent. So if I were to look at Dewald Township, and look at that as being $201,000, the township's take of that is 20 percent, that would be about $40,000 for the township on an annual basis for the life of the project.

So by going to a production tax, the idea was that it did more to promote community benefits. And it serves two purposes. It helps the developer upfront, because if he had to pay the value of that in property taxes and he's trying to service the debt on the project that probably crimps his cash flow, so by taking less up front the community gets a much larger piece of the pie over the life of the project, so it's kind of a win/win situation for both sides, if you want to look at it that way, I guess. So the idea is that, assuming the amount of

money they pay, if a governmental unit doesn't raise taxes, in essence, that lowers everybody else's mill rate.

MR. DARRELL BOOTS: Thank you.

MR. HARTMAN: Any other questions? Mark.

MR. WILLERS: One of the comments that David asked me to comment on towards the end of this was how the community project is involved. This isn't really part of the permitting process, but it is part of the permitting process because it is a community project. Because the Community Wind South board has asked what other things they could do for the community. And just to give you an idea what the Community Wind South is going to be talking to the local people about is Minwind Energy has been part of this, you know, supporting, we support kids that are going to the State Fair for 4H, and we've been doing school funding for projects that they're trying to accomplish. We would try to have, you know, third and fourth grade kids come out and see what's going on. And actually, one of the more unique projects we've been having is we've been having the high school physics class come out and actually do the math on point of moment and how much pressure that a 40-mile an hour wind pushes on so

many square feet of wind surface on the blades and things like that. So that's one of the other sides of the community project, and Minwind does it in Rock County.

MR. HARTMAN: Thank you, Mark. You know, in fact, I was doing some kind of back-of-the-hand calculations last week, and if you look at the rotor diameter the turbine is using to repower is 2.05 megawatts, I believe, and the rotor diameter I think is, what, 5,000 some meters, which translates to about, if I remember correctly, is about 82,000 square feet. So it's basically, you know, not quite two acres. Now, if you take those 15 turbines and you say you try to get a crop out of the ground, 15 times 82,000 comes to about 28 or 29 acres. So basically that's how much energy you're getting out of those 29 acres or 28 acres from those 15 turbines.

Now, if you're on the ground, basically, that's probably a small portion of the field. However, to get that much space in the air, again, you need turbine separation for wake loss, you need to worry about your setbacks from your microwave communication towers, you know, airports, farms, roads. So while the rotor area might be

collectively rather small, you need a much larger physical footprint to allow that development to happen. And it's a question of what's the best way of integrating a large wind energy facility into the community and into the landscape and so, basically, you know, what the state process does is it kind of defines a way by which that is done, I think, in an effective and fairly efficient manner.

Any other questions at all?

If not, I'll bring the meeting to a close. I'll be here for a little while afterwards if you have any questions of me.

Again, the comment period closes March 23rd at 4:30 p.m. So if you want to submit comments in writing, please feel free to do so, just postmark them before the 23rd. If you want to fax it be sure you fax it before 4:30. And if you want to e-mail, be sure that it's sent before 4:30 p.m. on March 23rd also.

If you have any questions between now and then, my card is over there. I have an 800 number on there and also my telephone number at work and my cell phone number. So if you have any questions I'll be glad to answer them any time between now and then, or after that, also, as far as that goes.

Again, as I mentioned earlier, the comment period closes March 23rd. Depending on my schedule with other projects, I'll try to kind of wrap this up and get it before the Commission sometime in April. For a decision, generally it takes the Commission, if it's a canned order, a few days for the order to come out. If there's some issues it might take a little bit longer.

So we're pretty much on the schedule, I think, that we laid out originally, we may be a little bit behind, but I think within a reasonable expectation of what we started out at anyhow.

Again, any other questions before we kind of disassemble?

If not, I'd like to thank you very much for attending. And I'll perhaps see you sometime in the future down here. I'll be down here a few times, I'm sure. And, again, I'll be here afterwards, and Jamie is here. Jamie does a lot of our avian and bat work so if you have any questions about that, please be sure to talk to her about that.

Otherwise, thank you very much for attending this afternoon.

MR. WILLERS: Thank you, Larry.